capita on the medical spending. **METHODS:** Our analysis can be chiefly divided into two respects, the wealth effect of income and the depreciation effect of health capital. We use the theoretical model of Grossman's health capital theory to analysis the relationship between income and medical expenditure. Then we use the 2 part model to empirical research the wealth effect and the depreciation effect of income separately. We also use instrumental variable to solve the endogenous problem. **RESULTS:** According to the study, the depreciation effect of health capital brought by the relatively lower income is not significant, but the income levels have significantly positive wealth effect on medical spending. The low-income people are inferior in terms of wealth and have heavier medical burden than high-income people. **CONCLUSIONS:** This result indicates that the low-income people may face shortage of health capital input, especially in poor rural area. Thus, the government should increase the low-income people's medical input and improve their medical security system.

PHP37

EVALUATION OF A MULTIDISCIPLINARY HOME-BASED MEDICATION REVIEW PROGRAM FOR ELDERLY SINGAPOREANS

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OBJECTIVES: (i) To determine the prevalence of drug-related problems (DRPs) among patients referred to a multidisciplinary home-based medication review (HBMR) program for elderly Singaporeans. (ii) To evaluate the effectiveness of the program in resolving DRPs and reducing health service utilization (HSU). **METHODS:** A retrospective case series was conducted at an academic medical centre in Singapore. Patients referred to the HBMR program between March 2011 and December 2012 were included. Home visits were conducted by a multidisciplinary team of pharmacists and care coordinators. DRPs identified were categorised and their outcomes (resolved/ unresolved) recorded by the pharmacist. HSU behaviour, consisting of hospital admissions and emergency visits, was evaluated 6 months before and after the home visit. Summary statistics were used to report patient characteristics and prevalence of DRP, while paired t-test was used to compare HSU behaviour pre and post HBMR. **RESULTS:** The analysis included 107 patients with mean (SD) age of 75.6 (7.6) years. There were 52 (48.6%) males, and 89 (83.2%) were Chinese. The team reviewed 1353 medications in total and identified 525 DRPs, corresponding to a mean (SD) of 4.9 (2.4) DRPs per patient. Of these, 34 (6.7%) and 174 (34.1%) DRPs were resolved with and without physician involvement respectively. The most common DRPs identified were failure to receive drug (n= 163, 31.0%) and untreated indication (n= 140, 26.7%). There was a reduction in mean (SD) hospital admissions (2.1 (1.5) vs 1.2 (1.5), p= 0.017) and emergency visits (2.1 (1.6) vs 1.2 (1.5), p= 0.005) post HBMR. Subgroup analysis of 62 patients with repeated admissions found a reduction in mean (SD) cost of hospitalisation post HBMR (SGD 17,423.69 (17,110.01) vs SGD 12,924.15 (14,564.49), p= 0.045). **CONCLUSIONS:** DRPs are prevalent among elderly Singaporeans. A HBMR program is useful in identifying and resolving DRPs, as well as reducing HSU.

PHP38

EVALUATION OF ADVERSE DRUG REACTION (ADR) MONITORING AND REPORTING SYSTEM IN CHINA

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OBJECTIVES: As a part of safety regulation, ADR monitoring plays an important role in the post-market surveillance. The purpose of this study was to evaluate China's ADR monitoring system and to provide insights for improving the system. **METHODS:** ADR data (2008-2012) were collected from reviewing the National ADR Information Bulletin, Pharmacovigilance Express, Annual Report of National ADR Monitoring, and an on-site data extraction from the National Center for ADR Monitoring. Effectiveness assessment was made based on both internal (e. g., quality of ADR reports, information processing efficiency, and risk control actions) and external indicators (e. g., ADR reporting rate and serious ADR control). **RESULTS:** During 2008 to 2012, the number of ADR reports increased from 602,000 to 1,200,000, of which serious ADR reports accounted for 13.3% to 20.0%. Reports from medical institutions declined from 85.7% in 2008 to 74.8% in 2012, while reports from pharmaceutical manufacturers and sellers increased from 10.4% to 24.4%. For the scope of monitoring, 34 provincial and 333 municipal ADR monitoring centers had established by 2012. The new ADR Monitoring Network System began running in 2011 and the number of network users rapidly increased from 34,000 to 150,000. For information processing efficiency, the average time lag between ADR occurrence and reporting was 23.6 days for overall and 20 days for serious cases. Regarding risk control actions, 33 National ADR Information Bulletin and 38 Pharmacovigilance Express were issued during 2009 to 2012. Sales restricting or suspending were executed 4 times, along with 27 drug label modifications and 6 drug recalls. **CONCLUSIONS:** China's ADR monitoring system have achieved a progress in recent years and functioned well to some extent. Efforts are needed to remove the barriers in ADR reporting and enhance risk control actions. More research on evaluating ADR monitoring system is also warranted.

PHP39

CORRELATION BETWEEN POISON SEVERITY ASSESSMENT AND OUTCOME IN ORGANOPHOSPHATE POISONING IN TERTIARY CARE HOSPITAL

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OBJECTIVES: To compare poison severity score with incidence of intermediate syndrome, ventilation and outcome in organophosphate poisoning. **METHODS:** A retrospective study was conducted in a tertiary care teaching hospital of South India. Data was collected retrospectively from medical record section from 2012 to 2013 in a suitable designed case record form. Data was analysed by using SPSS 20.0 with chi-square and one way anova. **RESULTS:** Total of 199 cases of organophosphate poisoning was documented out of which 135 (67.8%) were males and 64 (32.2%) were females. The average age in this group of patients was found to be 34.22 + 14.26. The average pre-hospitalization period was 1.58 + 2.07 days. Among them majority of the cases were suicidal (94.5%). Patients with a poison severity score of grade 1, 5.8% had intermediate syndrome. In grade 2 only 33.3% had intermediate syndrome and the most was seen in grade 3 where 60% had intermediate syndrome. Patients with a poison severity score of grade 1 only 10.6% were on ventilation, in grade 2 only 56.7% were on ventilation and in grade 3, 93.8% were on ventilation. Patients with a poison severity score of grade 1 had a recovery rate of 92.3%. Patients with a poison severity score of grade 2 had a recovery rate of 66.6% and patients with grade 3 had a recovery rate of 64.6%. **CONCLUSIONS:** As the severity in poison severity score increases other parameters like ventilation, intermediate syndrome and mortality also increases. There is a strong correlation between the poison severity score and outcome of the patient.

PHP40

DETECTION AND EVALUATION OF THE MEDICATION ERRORS IN DIFFERENT HOSPITALS IN PROVINCE OF THE PUNJAB, PAKISTAN

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OBJECTIVES: The study was conducted to detect and evaluate the medication errors in different hospitals in province of the Punjab, Pakistan. **METHODS:** A retrospective study was designed involving different hospitals namely: Shaukat Khanum Memorial Cancer Hospital Lahore, Mayo Teaching Hospital Lahore, Allied Teaching Hospital Faisalabad, District Head Quarter Hospital Sargodha, and District Head Quarter Hospital Gujrat of province of the Punjab, Pakistan. Medication errors were detected from the records of the patients on period from October to December 2010. Errors were categorized into Prescription error, Dispensing Error and administration Error. Descriptive statistics were used to describe demographic and disease characteristics of the patients. Percentages and frequencies were used to present the data. **RESULTS:** A total of 5972 (SKMCHL), 7950 (ATHF), 8249 (DHQS) and 6325 (DHQG) were registered. A sample of 4500 prescription from each of the hospital was taken for the study. A total of 50 (1.1%) of errors were detected form the record of Shaukat Khanum Memorial Cancer Hospital Lahore, in which administration errors were the highest (n=18). For Mayo Teaching Hospital Lahore there were 169 total errors were detected, in which prescription errors were the highest (n=60). For Allied Teaching Hospital Faisalabad there were 186 total errors were detected, in which administration errors were the highest (n=68). For District Head Quarter Hospital Sargodha there were 252 total errors were detected, in which administration errors were the highest (n=92), and District Head Quarter Hospital Gujrat there were 266 total errors were detected, in which administration errors were the highest (n=96). **CONCLUSIONS:** There were minimum numbers of medication errors observed in different hospitals, but the frequency of medication errors in private hospitals were lower then governmental hospitals. The roles of Pharmacists are needed to be enhanced so that these minimal errors should also be avoided.

PHP41

SURVEY FINDINGS ON EVALUATION OF TRAUMATOLOGIST'S WORKLOAD IN MONGOLIA

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OBJECTIVES: We aimed to study the workload of traumatologist's and analyze legal documents and materials relevant to medical professionals' workload and labor standards. **METHODS:** The research model of cross sectional study was utilized. In order to study the workload of doctors working at Trauma center, we used organization based observation and questionnaires to (1) define core job structure by observation, (2) to evaluate by questionnaires with indicators of "Job evaluation". **RESULTS:** Data was collected through 8 hours of observation and assessment of documents; It was used to evaluate traumatologists's workload in accordance with chronometrage method. In general, 385 minutes, which is after the deduction of 60 minutes of lunch break and short time breaks from 480 minutes of doctors' daily working hours, should be used for work. However, the average daily working time for study participants was 454.8 minutes, which is 69.8 minutes more than the expected time. The daily workload by time is seen doctors use 75.4% of their time for health care services, 21.9% for filling initial formats, 5.4% for PH care services; and 4.2% for pre-service. Moreover, 3.7% of time was spent for downtime that was not caused by waiting for next client or nurses. **CONCLUSIONS:** 1. Traumatologists's spend 71.7% of their working hours for provision of health care services and 15.6% for PH care service. It indicates a shortage of time for conducting sufficient PH activities which is the main duty in the workplace. 2. Many types of initial formats are requested at the primary health care settings and spending 21.9% of working hours affects to decrease in time for PH care and services.

PHP42

EVALUATING THE IMPACT OF DRUG DISPENSING SYSTEMS ON THE SAFETY AND EFFICACY IN A SINGAPORE OUTPATIENT PHARMACY

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OBJECTIVES: Automation of pharmacy processes can help to reduce medication errors as well as improve the efficacy of the medication picking, packing and labeling process. Since June 2012, two drug dispensing systems (DDS) began operations in the Singapore General Hospital Specialist Outpatient Clinic Pharmacy. This study sought to evaluate the impact of the DDS on safety and efficacy in the pharmacy. **METHODS:** The primary outcome of this study was the safety of the prescription filling process measured in terms of percentage prevented dispensing incidents contributed by DDS or manual picking of medications. The secondary outcome was the efficacy of the medication picking, packing and labeling process measured in terms of picking efficiency of each full time equivalent (FTE) when assigned to either the DDS or manual picking stations. Data pertaining to the pri-